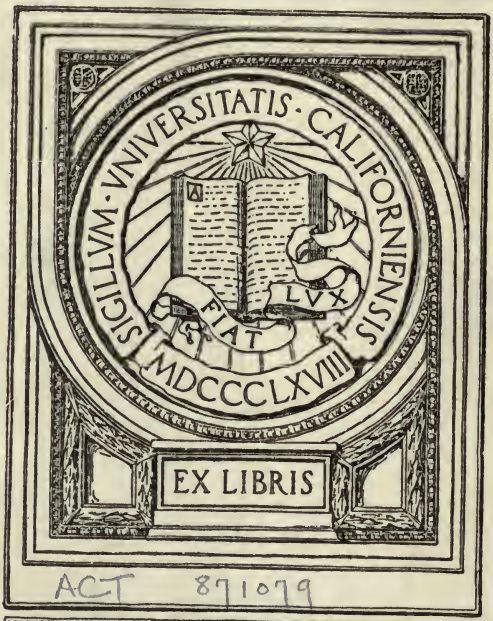
lliam Coles.

W. A. Setchell.

August 16
1887
B Cox

GIFT OF
Professor W.A.Setchell



ACT 891079

SB273
C34

A

TREATISE

ON THE

CULTURE

OF THE

TOBACCO PLANT.

Price Two Shillings and Sixpence.

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

http://www.archive.org/details/treatiseoncultur00carvrich

Published as the Act directs Mar 20 1779 by J Johnson St Pauls Church Yard

Flowers of the Tobacco plant

Drawn and Engraved by Copland & Sansom N.º 16 Maiden Lane

A

TREATISE

ON THE

CULTURE

OF THE

TOBACCO PLANT;

WITH THE

MANNER in which it is usually CURED.

ADAPTED TO

NORTHERN CLIMATES,

AND

DESIGNED FOR THE USE OF THE

LANDHOLDERS OF GREAT-BRITAIN.

TO WHICH ARE PREFIXED,

TWO PLATES OF THE PLANT AND ITS FLOWERS.

BY JONATHAN CARVER, ESQ.

Author of TRAVELS through the interior Parts of NORTH-AMERICA.

LONDON:

Printed for the AUTHOR,

And sold by J. JOHNSON, in St. Paul's Church-yard.

1779.

TO THE

RIGHT HONOURABLE

THE PRESIDENT,

VICE-PRESIDENTS,

AND

MEMBERS OF THE SOCIETY

FOR THE

ENCOURAGEMENT OF ARTS,

MANUFACTURES AND

COMMERCE.

THE Extenſion of every Branch of uſeful Knowledge being the great Object of the SOCIETY for the Encouragement of ARTS, MANUFACTURES and COMMERCE, the Author begs Leave to commit the following Treatiſe to their Patronage.

London, March 26th, 1779.

CONTENTS.

CHAPTER I.

Of the Diſcovery and Uſes of Tobacco P. 1

CHAPTER II.

A Deſcription of the Plant and its Flowers 9

CHAPTER III.

Of the Soil and Situation moſt proper for raiſing the Plant 13

CHAPTER IV.

Of its Culture, with a Deſcription of the Worm that annoys it 15

CHAPTER V.

Of the Manner in which it is uſually cured 28

APPENDIX 35

CONTENTS.

Published as the Act directs Mar. 20. 1759 by J. Johnson St. Paul's Church Yard

Tobacco plant

Drawn and Engraved by Copland & Johnson No. 46 Maiden Lane.

A TREATISE, &c.

CHAPTER I.

Of the Discovery and Uses of Tobacco.

TOBACCO, or Tabacco, is a medicinal plant, which remained unknown to Europeans till the discovery of America by the Spaniards; being first imported from thence about the year 1560. The Americans of the continent called it Petun; those of the islands, Yoli. Hernandez de Toledo sent it into Spain from Tabaco, a province of Yucatan, where he

firſt found and learned its uſe; and from which place he gave it the denomination it ſtill bears.

Sir Walter Raleigh firſt introduced the uſe of it into England, in the reign of Queen Elizabeth, about the year 1585. The plant was probably known in this kingdom before that time, by means of the Spaniards or Portugueſe; it is however certain, that he firſt taught the Engliſh to ſmoke it.

The French, on its firſt introduction among them, gave it various names, as Nicotiana, or the Embaſſador's Herb, from John Nicot, who came ſoon after it was diſcovered, as embaſſador to that court, from Francis the Second of Portugal, and brought ſome of it with him; which he preſented to a grand Prior of the houſe of Lorrain, and to Queen Catherine de Medicis: on this account it was ſometimes called the Grand Prior's Herb, and ſometimes the Queen's Herb.

When,

When, or in what manner this plant was introduced into the oriental nations is uncertain, although it is at preſent in general uſe among them. Conſiderable quantities of it are likewiſe cultivated in the Levant, the coaſts of Greece and the Archipelago, in the iſland of Malta and in Italy.

Tobacco is termed by botaniſts, Nicotiana; and is arranged by them as a genus of the Pentandria Monogynia claſs of plants. It is ſometimes uſed medicinally; but being very powerful in its operations, this muſt be done with great caution. The moſt common uſes of it are, either as a ſternutatory when taken by way of ſnuff, as a maſticatory by chewing it in the mouth, or as an effluvia by ſmoking it; and when uſed with moderation is not an unhealthy amuſement, whether it repleniſhes the humble pouch of the ruſtic, or the golden box of the courtier.

Before pipes were invented, it was uſually ſmoked in ſegars, and they are ſtill in uſe

among ſome of the ſouthern nations. The method of preparing theſe is at once ſimple and expeditious: a leaf of tobacco being formed into a ſmall twiſted roll ſomewhat larger than the ſtem of a pipe, and about eight inches long, the ſmoke is conveyed through the winding folds, which prevent it from expanding, as through a tube; ſo that one end of it being lighted, and the other applied to the mouth, it is in this form uſed without much inconvenience: but in proceſs of time, pipes being invented, they were found more commodious vehicles for the ſmoke, and are now in general uſe.

Among all the productions of foreign climes introduced into theſe kingdoms, ſcarcely any has been held in higher eſtimation by perſons of every rank than tobacco. In the countries of which it is a native, it is conſidered by the Indians as the moſt valuable offering that can be made to the Beings they worſhip: they uſe it in all their civil and religious ceremonies. When once its

ſpiral

ſpiral wreaths aſcend from the feathered pipe of peace, the compact that has juſt been made, is conſidered as ſacred and inviolable. Likewiſe, when they addreſs their great Father, or his guardian Spirits, reſiding as they believe in every extraordinary production of nature *, they make liberal offerings of this valuable plant to them, doubting not but that they ſecure thereby the protection they requeſt.

Smoking was at firſt ſuppoſed to be the only means by which its virtues could be attained; but at length it was found out that the juices of it extracted by chewing were of a cordial nature, alleviating, in laborious employments, the cravings of hunger, or the depreſſion of fatigue; and alſo, that the powder of it received into the head through the noſtrils, in moderate quantities, was a ſalubrious and refreſhing ſternutatory. For theſe purpoſes, the Americans inhabit-

* Vide Travels into the interior parts of North-America, chap. 13, page 382.

ing

ing the interior ſettlements manufacture it in the following eaſy manner. Being poſſeſſed of a tobacco-wheel, which is a very ſimple machine, they ſpin the leaves, after they are properly cured, into a twiſt of any ſize they think fit, and having folded it into rolls of about twenty pounds weight each, they lay it by for uſe. In this ſtate it will keep for ſeveral years, and be continually improving, as it every hour grows milder. When they have occaſion to uſe it, they take off ſuch a length as they think neceſſary, which, if deſigned for ſmoking, they cut into ſmall pieces, for chewing into longer, as choice directs; if they intend to make ſnuff of it they take a quantity from the roll, and laying it in a room where a fire is kept, in a day or two it will become dry, and being rubbed on a grater will produce a genuine ſnuff. Thoſe, in more improved regions, who like their ſnuff ſcented, may apply to it ſuch odoriferous waters as they can procure, or think moſt pleaſing.

The Illinois uſually form it into carots, which is done by laying a number of leaves, when cured, on each other, after the ribs have been taken out, and rolling them round with packthread, till they become cemented together. Theſe rolls commonly meaſure about eighteen or twenty inches long, and nine round in the middle part. But as many other methods are at preſent well known in England, that probably anſwer the purpoſe full as well as theſe, it is almoſt unneceſſary to deſcribe them.

Theſe directions are here given for the benefit of thoſe who raiſe tobacco for their own uſe, and chuſe to make their ſnuff without applying to the manufacturer for it.

Among the articles of commerce tobacco holds a diſtinguiſhed rank, and affords no inconſiderable addition to the revenues of the ſtate. Before the preſent unhappy diſſentions broke out between Great-Britain and America, about ninety-ſix thouſand hogſheads were annually imported from

Maryland

Maryland and Virginia. Thirteen thouſand five hundred of which were conſumed at home; the duty of which, at the rate of 26*l.* 1*s.* per hogſhead, amounted to 351,765*l.* The remaining eighty-two thouſand, five hundred hogſheads were exported to various parts of Europe, and their value received in ſpecie, or the produce of thoſe countries.

To the uſes already enumerated, I ſhall add another to which tobacco might be applied, that I believe has never been made known to Europeans, and which will render it much more eſtimable than any of the foregoing. It has been found by the Americans to anſwer the purpoſe of tanning leather, as well, if not better, than bark; and was not the latter ſo plentiful in their country would be generally uſed by them inſtead of it. I have been witneſs to many experiments wherein it has proved ſucceſsful, eſpecially on the thinner ſorts of hides, and can ſafely pronounce it to be, in countries where bark is ſcarce, a valuable ſubſtitute for that article.

CHAP.

CHAPTER II.

A Deſcription of the Plant and its Flowers.

THERE are ſeveral ſpecies of the Tobacco Plant, and theſe are chiefly diſtinguiſhable by their flowers, and the junction of the leaves to the ſtalks; but as this is not intended for a Botanical Treatiſe, I ſhall confine my deſcription to thoſe ſorts which are cultivated in the colonies for exportation: theſe are two; the Oronokoe and the ſweet-ſcented; which differ from each other in no reſpect but in the ſhape of their leaves, thoſe of the former being longer and narrower than the latter. Both are tall, herbaceous plants, of an erect growth and noble foliage, riſing each with a ſtrong ſtem (in their native ſoil) to the height of from ſix to nine feet. The ſtalk is upwards of an inch diameter near the root, and ſurrounded with a kind of hairy or velvet,

clammy ſubſtance, of a yellowiſh green colour. The leaves, which are rather of a deeper green, grow to the ſtalk alternately, at the diſtance of about two or three inches from each other. They are oblong, of a ſpear-ſhaped-oval, and ſimple; without pedicles embracing the ſtalk by an auriculated baſe. The largeſt are about twenty inches long, decreaſing in ſize as they aſcend, till they are not longer than ten inches, and nearly half as broad. The face of the leaves is much undulated, or corrugated, not unlike thoſe of ſpinnage when full ripe. In their firſt ſtate, at the time they do not exceed five or ſix inches, the leaves are uſually of a full green, and rather ſmooth, but as they increaſe in ſize they acquire a yellowiſh caſt and become rougher.

The ſtem and branches are terminated by large bunches of flowers, collected into cluſters of a delicate red, the edges, when quite blown, inclining to a pale purple. The flowers

con-

continue in ſucceſſion until the end of ſummer, when they make room for the ſeed. Theſe are of a brown colour, kidney-ſhaped, and very ſmall, each capſule generally containing about a thouſand, and the whole produce of a ſingle plant is eſtimated at three hundred and fifty thouſand. The ſeeds are uſually ripe in the month of September, and when perfectly dry may be rubbed out and preſerved in bags till the following ſeaſon.

The Oronokoe, or, as it is termed by the ſeedſmen, the long Virginia, appears to me to be the ſort beſt ſuited to bear the rigour of a northern climate, the ſtrength of the plant, as well as the ſcent and efficacy of the leaves being greater than the other. The ſweet-ſcented flouriſhes moſt in a ſandy ſoil and warm countries, where it greatly exceeds the former in the celerity of its growth; and although, as I have before obſerved, it differs from the Oronokoe only in the ſhape

UNIVERSITY OF CALIFORNIA LIBRARY

of its leaves, being ſhorter and rounder, yet it is unlike in its ſtrength and flavour, being, agreeable to its name, much milder and pleaſanter.

As a ſpecies of garden plants, the Nicotiana is an ornamental annual for the pleaſure ground, as it attains a majeſtic ſtature, and being adorned with fine luxuriant leaves, and large cluſters of pleaſing flowers which terminate all the ſhoots, during the autumn it exhibits an elegant appearance.

For a more compleat idea of the Oronokoe plant and its flowers, the reader is referred to the plate prefixed to this Work. But it muſt be obſerved, that the number of leaves repreſented on the ſtalk is not deſigned to ſerve as a rule for topping the tobacco, as directed in the fourth chapter. Only a few of them are annexed to the ſtalk, that the repreſentation of the leaf might be the more compleat.

CHAP.

CHAPTER III.

Of the Soil and Situation moſt proper for raiſing the Plant.

THE beſt ground for raiſing the plant is a warm, kindly, rich ſoil, that is not ſubject to be over-run with weeds; for from theſe it muſt be totally cleared. The ſoil in which it grows in its native climate, Virginia, is inclining to ſandy, conſequently warm and light; the nearer therefore the nature of the land in which it is planted in England approaches to that, the greater probability there is of its flouriſhing here. Other kinds of ſoils may probably be brought to ſuit it, by a mixture with ſome attenuating ſpecies of manure, but a knowledge of this muſt be the reſult of repeated trials. It muſt however be remembered, that whatever manure is added to the ſoil muſt be thoroughly incorporated with it.

The

The ſituation moſt preferable for a plantation is the ſouthern declivity of a hill, rather gradual than abrupt; or a ſpot that is ſheltered by a wall, a bank, or any other means, from the blighting north winds which ſo frequently blow, during the ſpring months, in this iſland: but at the ſame time it is neceſſary to obſerve, that the plants muſt enjoy a free current of air; for if that be obſtructed they will not proſper.

CHAP.

CHAPTER IV.

Of its Culture, with a Deſcription of the Worm that annoys it.

AS the tobacco plant, being an annual, is only to be raiſed from ſeed, I would particularly recommend to ſuch as mean to cultivate it, the greateſt care in purchaſing theſe, leſt by ſowing ſuch as is not good, they loſe, with their expected crop, the ſeaſon. The different ſorts of the ſeeds not being diſtinguiſhable, like the plants, from each other, nor the goodneſs to be aſcertained by their appearance, the purchaſer, till he has raiſed a ſupply from his own cultivation, muſt depend on the veracity of the ſeedſman; who may be alſo ſometimes deceived, having nothing to rely on but the honour of the perſon who raiſed it: prudence therefore requires that he ſhould

ſhould apply to a perſon of character in that profeſſion.

In deſcribing the manner in which the plant ought to be raiſed from the ſeed, as well as in the ſucceeding proceſs, I ſhall confine myſelf (without regarding the methods uſually purſued in Virginia or Maryland, which, from the difference of the climate, can be of little ſervice here) to the practice of the northern colonies of America; as theſe are more parallel in their latitude to England. And there being even a difference between the climate of theſe and that of Great-Britain, to the diſadvantage of the latter (I mean with regard to the cultivation of the tobacco plant) I ſhall minutely attend to this variation, and in the directions I give endeavour to guard againſt the inconveniences of it. Theſe inſtructions ſhall likewiſe be given in plain and familiar terms, and not in a language that can be only underſtood by the Botaniſt or Gardener, that this Treatiſe may be of general uſe.

About

About the middle of April, or rather ſooner in a forward ſpring, (for the ſeaſon muſt be attended to, as this plant will not bear forcing) ſow the ſeed in beds firſt prepared for the purpoſe, compoſed of ſuch ſoil as before deſcribed, mixed with ſome warm, rich manure. In a cold ſpring, regular hot beds would be moſt eligible for this purpoſe; and indeed the Gardeners of this country are perſuaded, that the Nicotania cannot be raiſed in any other way; but as theſe are ſeldom to be found in the garden of the farmer, and as I am convinced that if the weather is not remarkably ſevere, they might be reared without doors, for his benefit I ſhall give the following inſtructions relative to their treatment.

Having ſown the ſeed in the manner directed, on the leaſt apprehenſion of a froſt after the plants appear, it will be neceſſary to ſpread mats over the beds, a little elevated from the ground by poles laid acroſs, that they may not be cruſhed. Theſe how-

ever muſt be removed in the morning ſoon after the ſun appears, that they may receive as much benefit as poſſible from its warmth, and from the air. In this manner proceed till the leaves have attained the ſize of about two inches in length, and one in breadth, which they will do in about a month after they are ſown, or near the middle of May, when the froſts uſually are at an end. One invariable rule for their being able to bear removal is, when the fourth leaf is ſprouted, and the fifth juſt appears.

Then take the opportunity of the firſt rains, or gentle ſhowers, to tranſplant them into ſuch a ſoil and ſituation as before deſcribed. This muſt be done in the following manner: The land muſt be plowed, or dug up with ſpades, and made as mellow and light as poſſible. Where the plants are to be placed, raiſe with the hoe ſmall hillocks at the diſtance of two feet, or a little more, from each other, taking care that no hard ſods or lumps are in it, and then juſt

indent

indent the middle of each, without drilling holes as for ſome other plants.

When your ground is thus prepared, dig in a gentle manner from their native bed, ſuch plants as are arrived at the ſtate before-mentioned, and drop, as you paſs, one on every hillock. Inſert a plant gently into each center, preſſing the ſoil around it with your fingers, and taking the greateſt care, during the operation, that you do not break off any of the leaves, which are at this time exquiſitely tender. If the weather proves dry, after they are thus tranſplanted, they muſt be watered with ſoft water, in the ſame manner as is uſually done to coleworts or plants of a ſimilar kind.

Notwithſtanding you now appear to have a ſufficient quantity of plants for the ſpace you intend to cultivate, yet it is neceſſary that you continue to attend to your bed of ſeedlings, that you may have enough to ſupply any deficiences which, through accident, might ariſe. From this time great care muſt be

taken to keep the ground ſoft, and free from weeds, by often ſtirring with your hoe the mould round the roots; and to prune off the dead leaves that ſometimes are found near the bottom of the ſtalk.

The difference of this climate from that in which I have been accuſtomed to obſerve the progreſs of this plant, will not permit me to direct with certainty the time which is moſt proper to take off the top of it, to prevent it from running to ſeed. This knowledge can only be perfectly acquired by experience. When it has riſen to upwards of two feet, it commonly begins to put forth the branches on which the flowers and ſeeds are produced; but as this expanſion, if ſuffered to take place, would drain the nutriment from the leaves, which are the moſt valuable part, and thereby leſſen their ſize and efficacy, it becomes needful at this ſtage to nip off the extremity of the ſtalk, to prevent its growing higher. In ſome other climates the top is commonly

cut

cut off when the plant has fifteen leaves. If the tobacco is intended to be a little ſtronger than uſual, this is done when it has only thirteen; and ſometimes, when it is choſen to be remarkably powerful, eleven or twelve leaves only are allowed to expand. On the contrary, if the planter is deſirous to have his crop very mild, he ſuffers it to put forth eighteen or twenty: but in this calculation the three or four lower leaves next the ground, which do not grow ſo large and fine as the others, are not to be reckoned.

This is denominated "topping the tobacco," and is much better done by the finger and thumb, than with any inſtrument, becauſe the former cloſe, at the ſame time, the pores of the plant; whereas, when it is done with the latter, the juices are in ſome degree exhauſted. And though this might appear unimportant, yet every method that tends to give vigour to the leaves ſhould be carefully purſued.

For

For the ſame reaſons care muſt be taken to nip off the ſprouts that will be continually ſpringing up at the junction of the leaves with the ſtalks. " This is termed ſuccouring or ſuckering the tobacco," and ought to be repeated as often as occaſion requires.

The laſt, and not the leaſt concern in the cultivation of this plant, is the deſtruction of the worm that nature has given it for an enemy, and which, like many other reptiles, preys on its benefactor. To deſtroy theſe, which are the only inſects that moleſt this plant, or at leaſt to keep them under, for it is impoſſible totally to exterminate them, every leaf muſt be carefully ſearched. As ſoon as a wound is diſcovered, and it will not be long before it is perceptible, care muſt be taken to deſtroy the cauſe of it, who will be found near it, and from his unſubſtantial texture, which I ſhall deſcribe at the concluſion of this chapter, be eaſily cruſhed: but the beſt method is to pluck it away by the horn, and then cruſh it. Without

out a conſtant attention to theſe noxious inſects, a whole field of plants may be ſoon deſtroyed; and even if any of them are left in the leaves, during the cure, they prove equally deſtructive. This is termed "worming the tobacco;" and as theſe worms are found moſt predominant the latter end of July, and the beginning of Auguſt, they muſt be particularly attended to at that ſeaſon.

As I have juſt obſerved, that it is impoſſible, without experience, to point out the due time for topping the plant, ſo it is equally as impoſſible to aſcertain the time it will take to ripen in this climate. That can only be known by future obſervations; for as it is at preſent only cultivated in England as an ornament for the garden, no attention has, I believe, been hitherto beſtowed on the preſervation of its leaves. The apparent ſigns, however, of its maturity are theſe: The leaves, as they approach a ſtate of ripeneſs, become more corrugated

or

or rough; and when fully ripe, appear mottled with yellowiſh ſpots on the raiſed parts, whilſt the cavities retain their uſual green colour. They are, at this time, alſo thicker than they have before been, and are covered with a kind of downy velvet, in the ſame manner as the ſtalks are deſcribed to be, in the preceding chapter.

If heavy rains happen at this critical period, they will waſh this excreſcent ſubſtance off, and thereby damage the plants. In this caſe, if the froſty nights are not begun, it is proper to let them ſtand a few days longer; when, if the weather be more moderate, they will recover this ſubſtance again. But if a froſt unexpectedly happens during the night, they muſt be carefully examined in the morning before the ſun has any influence on them; and thoſe which are found to be covered with froſty particles, whether thoroughly ripe or not, muſt be cut up: for though they may not all appear to be arrived at a ſtate of maturity, yet they cannot

cannot be far from it, and will differ but little in goodneſs from thoſe that are perfectly ſo.

Having now given every inſtruction that occurs to my memory relative to the culture of the plant, I ſhall proceed, as propoſed, to deſcribe the worm that infeſts it. It is of the horned ſpecies, and appears to be peculiar to this plant; ſo that in many parts of America it is diſtinguiſhed by the name of the Tobacco-Worm. In what manner it is firſt produced, or how propagated, is uncertain; but doubtleſs by the ſame inexplicable means that nature makes uſe of to continue the exiſtence of many other claſſes of this minute part of the creation. The firſt time it is diſcernible, is when the plants have gained about half their height: it then appears to be nearly as large as a gnat; ſoon after which it lengthens into a worm, and by degrees increaſes in magnitude to the ſize of a man's finger. In ſhape it is regular from its head to its tail,

without any diminution at either extremity; indented or ribbed round at equal diſtances, nearly a quarter of an inch from each other, and having at every one of theſe diviſions, a pair of feet or claws, by which it faſtens itſelf to the plant. Its mouth, like that of the caterpillar, is placed under the fore-part of the head. On the top of the head, between the eyes, grows a horn about half an inch in length, and greatly reſembling a thorn; the extreme part of which is in colour brown, of a firm texture, and ſharp pointed. By this horn, as before obſerved, it is uſually plucked from the leaf. It is eaſily cruſhed, being only, to appearance, a compoſition of green juice incloſed by a membranous covering, without the internal parts of an animated being. The colour of its ſkin is in general green, interſperſed with ſpots of a yellowiſh white; and the whole covered with a ſhort hair ſcarcely to be diſcerned. To preſerve the planter from the ravages of an inſect ſo deſtructive to his plantation, as

he

he will thereby be able to diſtinguiſh it with a greater degree of preciſion, I have given in the frontiſpiece as exact a repreſentation of it as can be done from memory.

CHAPTER V.

Of the Manner in which it is uſually cured.

WHEN the plant is found, agreeable to the preceding directions, to be fit for gathering, on the firſt morning that promiſes a fair day, before the ſun is riſen, take an axe or a long knife, and holding the ſtalk near the top with one hand, ſever it from its root with the other, as low as poſſible. Having done this, lay it gently on the ground, ſo as not to break off the leaves, and there let it remain expoſed to the rays of the ſun throughout the day, or until the leaves are entirely wilted, as it is termed in America; that is, till they become limber, and will bend any way without breaking.

But if, on the contrary, the rain ſhould continue without any intervals, and the plants appear to be full ripe, they muſt be cut down and houſed immediately. This

muſt

muſt be done, however, with great care, that the leaves, which are in this ſtate very brittle, may not be broken. Being placed under proper ſhelter, either in a barn or a covered hovel, where they cannot be affected by the rain or too much air, they muſt be thinly ſcattered on the floor, and if the ſun does not appear for ſeveral days, ſo that they can be laid out again, they muſt remain to wilt in that manner; which is not indeed ſo deſirable as in the ſun, nor will the tobacco prove quite ſo good.

When the leaves have acquired the flexibility before deſcribed, the plants muſt be laid in heaps, or rather in one heap, if the quantity be not too great, and in about twenty-four hours they will be found to ſweat. But during this time, when they have lain for a little while, and begin to ferment, it is neceſſary to turn them; bringing thoſe which are in the middle to the ſurface, and placing thoſe which were at the ſurface, in the middle, that by this means the whole quantity may be equally fermented.

The

The longer they lie in this ſituation the darker coloured the tobacco becomes. This is termed " ſweating the tobacco."

After they have lain in this manner for three or four days, for in a longer time they may heat ſo much as to grow mouldy, the plants may be faſtened together in pairs, with cords or wooden pegs, near the bottom of the ſtalk, and hung acroſs a pole, with the leaves ſuſpended, in the ſame covered place, a proper interval being left between each pair. In about a month the leaves will be thoroughly dried, and of a proper temperature to be taken down. This ſtate may be aſcertained by their appearing of the ſame colour as thoſe imported from America, with which few are unacquainted. But this can be done at no other ſeaſon than during wet weather; for the tobacco being a plant greatly abounding with ſalts, it is always affected if there is the leaſt humidity in the atmoſphere, even though it be hung in a dry place. If this rule be

not

not obſerved, but they are removed in dry weather, the external parts of the leaves will crumble into duſt, and a conſiderable waſte will attend its removal.

As ſoon as the plants are taken down, they muſt once more be laid in a heap, and preſſed with heavy logs of wood for about a week. This climate, however, may require a longer time. While they remain in this ſtate, it will be neceſſary to introduce your hand frequently into the heap, to diſcover whether the heat be not too intenſe; for in large quantities this will ſometimes be the caſe, and conſiderable damage will accrue from it.

When they are found to heat too much, that is, when the heat exceeds a moderate glowing warmth, part of the weight by which they are compreſſed muſt be taken away; and the cauſe being removed, the effect will ceaſe. This is called "the ſecond or laſt ſweating," and when compleated, which it generally will be in about the time

time juſt mentioned, the leaves may be ſtripped from the ſtalks for uſe. Many omit this laſt operation, but I think it takes away any remaining harſhneſs, and renders the tobacco more mellow. The ſtrength of the ſtalk alſo is diffuſed by it through the leaves, and the whole maſs becomes equally meliorated.

When the leaves are ſtripped from the ſtalks, they are to be tied up in bunches or hands, and kept in a cellar, or any other place that is damp; though if not handled in dry weather, but only during a rainy ſeaſon, it is of little conſequence in what part of the houſe or barn they are laid up. At this period the tobacco is thoroughly cured, and equally as proper for manufacturing as that imported from the colonies.

Having gone through the whole proceſs, if it has been properly managed, that raw fiery taſte ſo frequently found in the common ſale tobacco will be totally eradicated, and though it retains all its ſtrength, will

be

be ſoft and pleaſing in its flavour. Thoſe who are curious in their tobacco in the northern colonies of America ſprinkle it, when made up into the roles for keeping, deſcribed in the firſt chapter, with ſmall common white wines or cyder, inſtead of ſalt water, which gives it an inexpreſſibly fine flavour.

APPENDIX.

THAT eſtrangement which at preſent ſubſiſts between Great-Britain and the American colonies, renders a ſupply of the article of which I treat, and which is become ſo eſſentially neceſſary to the happineſs of a great number of his Majeſty's ſubjects, very uncertain; it depends, in a great meaſure, on the prizes, freighted with this commodity, that happen to be taken, and on the quantities which are imported from other commercial ſtates at a high price. It is therefore to be hoped that the legiſlature will take into conſideration ſo important a concern, and purſue ſuch meaſures as will

conduce to remove this uncertainty. A remedy is at hand; that of cultivating it in these kingdoms; but this appears to be prohibited by the following ancient acts of parliament:

In an act of Charles the Second, entitled, "An act for prohibiting the planting, setting, or sowing tobacco in England and Ireland," the prohibition is thus expressed: "Your Majesty's loyal and obedient "subjects, the Lords and Commons in this "present parliament assembled, considering "of how great concern and importance it "is, that the colonies and plantations of "this kingdom in America, be defended, "protected, maintained, and kept up, and "that all due and possible encouragement "be given unto them; and that not only "in regard great and considerable dominions and countries have been thereby "gained, and added to the imperial crown "of this realm, but for that the strength "and welfare of this kingdom, do very much

"depend

" depend upon them, in regard of the em-
" ployment of a very conſiderable part of
" its ſhipping and ſeamen, and of the vent
" of very great quantities of its native com-
" modities and manufactures, as alſo of its
" ſupply with ſeveral conſiderable commo-
" dities which it was wont formerly to have
" only from foreigners, and at far dearer
" rates: And foraſmuch as tobacco is one
" of the main products of ſeveral of thoſe
" plantations, and upon which their wel-
" fare and ſubſiſtence, and the navigation
" of this kingdom, and vent of its commo-
" dities thither, do much depend; and in
" regard it is found by experience, That by
" the planting of tobacco in theſe parts
" your Majeſty is deprived of a conſiderable
" part of your revenue ariſing by cuſtoms
" upon imported tobacco; Do moſt humbly
" pray, That it may be enacted by your
" Majeſty: And it is hereby enacted by the
" King's Moſt Excellent Majeſty, and the
" Lords and Commons in this preſent par-
" liament

" liament assembled, and by authority of
" the same, That no person or persons
" whatsoever, shall or do from and after
" the first day of January, in the year of
" our Lord One Thousand Six Hundred
" and Sixty, set, plant, improve to grow,
" make or cure any tobacco either in seed,
" plant, or otherwise, in or upon any
" ground, earth, field, or place within the
" kingdom of England, dominion of Wales,
" islands of Guernsey or Jersey, or town of
" Berwick upon Tweed, or in the king-
" dom of Ireland, under the penalty of the
" forfeiture of all such tobacco, or the
" value thereof, or of the sum of forty shil-
" lings for every rod or pole of ground so
" planted, set or sown as aforesaid, and so
" proportionably for a greater or lesser
" quantity of ground; one moiety thereof
" to his Majesty, his heirs and successors;
" and the other moiety to him or them that
" shall sue for the same, to be recovered
" by bill, plaint, or information in any
" court

" court of record, wherein no eſſoign, pro-
" tection or wager in law ſhall be allowed.

" Provided always and it is hereby enac-
" ted, That this act, nor any thing therein
" contained, ſhall extend to the hindering
" of the planting of tobacco in any phyſic
" garden of either univerſity, or in any
" other private garden for phyſic or chy-
" rurgery, only ſo as the quantity ſo plant-
" ed exceed not half of one pole in any one
" place or garden."

In this act all ſheriffs, juſtices of the peace, or other officers, upon information or complaint made unto them, are empowered to cauſe to be burnt, plucked up, conſumed or utterly deſtroyed all ſuch tobacco, ſet, ſown, planted or growing within their juriſdiction. But it not proving forcible enough to prevent the cultivation of tobacco; in the fifteenth year of the reign of the ſaid King, a clauſe was inſerted in an act, entitled, " An act for the encouragement of trade," to the following purport, clauſe 18.

" And

" And foraſmuch as planting and making
" tobacco within the kingdom of England
" doth continue and encreaſe, to the appa-
" rent loſs of his ſaid Majeſty in his cuſtoms,
" the diſcouragement of the Engliſh plan-
" tations in the parts beyond the ſeas, and
" prejudice of this kingdom in general,
" notwithſtanding an act of parliament
" made in the twelfth year of his ſaid Ma-
" jeſty's reign for prevention thereof, en-
" tituled, An act for prohibiting the plant-
" ing, ſetting or ſowing of tobacco in Eng-
" land and Ireland; and foraſmuch as it is
" found by experience, that the reaſon why
" the ſaid planting and making of tobacco
" doth continue, is, That the penalties
" preſcribed and appointed by that law are
" ſo little, as to have neither power or effect
" over the tranſgreſſors thereof; For remedy
" therefore of ſo great an evil, Be it enacted
" by the authority aforeſaid, That all and
" every the perſon or perſons whatſoever,
" that do, or ſhall at any time hereafter

" ſet,

" ſet, plant or ſow any tobacco in ſeed,
" plant or otherwiſe, in or upon any ground,
" field, earth, or place within the kingdom
" of England, &c. ſhall, over and above
" the penalty of the ſaid act for that pur-
" poſe ordained, for every ſuch offence for-
" feit and pay the ſum of ten pounds for
" every rod or pole of ground that he or
" they ſhall ſo plant, ſet, or ſow with to-
" bacco, and ſo proportionably for a greater
" or leſſer quantity of ground; one third
" part thereof to the King, one other third
" part to the poor of ſuch reſpective pariſh or
" pariſhes wherein ſuch tobacco ſhall be ſo
" planted, and the other third thereof to
" him or them that ſhall ſue for the ſame."
" Phyſic gardens excepted as before."

This penalty alſo proving inſufficient to put a ſtop to the cultivation, it was found neceſſary in the twenty-ſecond year of the reign of the ſaid Charles the Second to enforce it by the following act, entitled, " An act to prevent the planting of tobacco

" in England, and regulating the plantation " trade."

" Whereas the ſowing, ſetting, planting " and curing of tobacco, within divers parts " of the kingdom of England, doth conti- " nue and increaſe, to the apparent loſs of " his Majeſty's cuſtoms, and the diſcou- " ragement of his Majeſty's plantations in " America, and great prejudice of the trade " and navigation of this realm, and the vent " of its commodities thither, notwithſtand- " ing an act of parliament made in the " twelfth year of his Majeſty's reign that " now is, for the prevention thereof, enti- " tled, ' An act for prohibiting the plant- ' ing, ſetting, or ſowing of tobacco in ' England and Ireland;' " And alſo one " other act of this preſent parliament, made " in the fifteenth year of his ſaid Majeſty's " reign, entitled, ' An act for the encou- ' ragement of trade.'

" And foraſmuch as the remedies and " proviſions by theſe laws are found not

" large

" large enough to obviate and prevent the
" planting thereof, Be it therefore enacted
" by the King's Moſt Excellent Majeſty,
" by and with the advice and conſent of the
" Lords Spiritual and Temporal, and Com-
" mons in Parliament aſſembled, and by
" the authority of the ſame, That from
" and after the firſt day of May, which ſhall
" be in the year of our Lord, One Thou-
" ſand Six Hundred and Seventy-one, all
" juſtices of the peace, within their ſeveral
" limits and juriſdictions, ſhall and do, a
" month before every general quarter-ſeſ-
" ſions to be holden for their reſpective
" counties, iſſue forth their warrants to all
" high-conſtables, petty-conſtables, and
" tything-men, within their ſeveral limits,
" thereby requiring the ſaid high-conſta-
" bles, petty-conſtables and tything-men,
" and every of them, to make diligent ſearch
" and inquiſition, what tobacco is then
" ſown, ſet, planted, growing, curing,
" cured or made within their ſeveral and

" reſpective limits and juriſdictions, and " by whom; and to make a true and lawful " preſentment in writing upon oath, at the " next general quarter-ſeſſions to be holden " for ſuch county, of the names of all ſuch " perſons as have ſown, ſet, planted, cured " or made any tobacco; and what the full " quantity of land is, or was ſown, ſet or " planted therewith, and who are the im- " mediate tenant or tenants, or preſent oc- " cupiers of the land ſo ſown, ſet or plant- " ed, who are or ſhall be deemed planters " thereof, to all intents and purpoſes.

" Which ſaid preſentment upon oath, " ſhall be received and filed by the clerk " of the ſaid county in open ſeſſions; and " after ſuch receipt and filing, ſhall be a " ſufficient conviction in law to all intents " and purpoſes, of all ſuch perſons as ſhall " be ſo preſented for the ſowing, ſetting, " planting, improving to grow, making or " curing tobacco, either in ſeed, plant, " leaf, or otherwiſe, contrary to the ſaid

" recited

" recited act or either of them ; unleſs ſuch " perſon or perſons ſo preſented ſhall, ac- " cording to the uſual forms, traverſe ſuch " preſentment.

" And it is hereby further enacted, That " all conſtables, tything-men, bailiffs, and " other public officers, ſhall and do within " their reſpective juriſdictions, from time to " time, as often as occaſion ſhall require, " within fourteen days after warrant from " two or more of the juſtices of the peace " within ſuch county, town, city or place, " to them, calling to their aſſiſtance ſuch " perſon or perſons as they and every of " them ſhall find convenient and neceſſary, " pluck up, burn, conſume, tear to pieces, " and utterly deſtroy, all tobacco ſeed, " plant, leaf, planted, ſowed, or growing " in any field, earth or ground."

The other clauſes relative to the cultivation of tobacco in this act, are, " A penalty " on the officers of five ſhillings for every " rod, perch, or pole of ground ſo ſet, " planted,

" planted, or ſowed with tobacco, that " ſhall be ſuffered or permitted to grow or " be conſumed in ſeed, plant or leaf, with- " in their juriſdiction, by the ſpace of " fourteen days after the receipt of ſuch " warrant or warrants." " A penalty for " refuſing to aſſiſt the officers, and alſo for " reſiſting them." And after making the ſame proviſion as before for the phyſic gardens, and reciting many other articles for regulating the plantation trade, the act thus concludes: " Provided always, and be it " enacted, That this act ſhall continue in " force for nine years, and from thence to " the next ſeſſion of parliament, and no " longer."

By an act made the fifth of George the Firſt, theſe acts are confirmed and rendered perpetual.

The repeated inforcement of them ſeems to prove, that large quantities of tobacco were raiſed at that period in theſe dominions, and that even the penalty of ten pounds

pounds per rod was not ſufficient to deter perſons from the cultivation of it.

As an application has juſt been made to parliament for an act to permit the growth of it in Ireland, the obſervations made in this Treatiſe will not, I flatter myſelf, be thought unworthy the notice of the legiſlature, that ſo advantageous a branch of agriculture may not be confined to one diviſion of Great-Britain, but that every part of theſe united kingdoms may be allowed to ſhare in the emoluments ariſing from it.

The advantages which will proceed from the permiſſion, are too many to be enumerated in ſo ſhort a Work. Whether a ſufficient quantity can be raiſed in theſe kingdoms to ſupply the demand there was for it before the American trade became interrupted, (as a revival of the demand will be the certain conſequence of a reduction of the price) time alone can diſcover: but if enough be only raiſed for home conſumption, this will

will be no inconſiderable ſaving to the nation.

When the very great profits, ariſing to the planter from every acre of tobacco, come to be known, (they will appear chimerical if I inform my readers to what they amount) I doubt not but that tobacco will be conſidered as the moſt valuable branch of agriculture which can be attended to. An emulation, heightened by the proſpect of gain, being once excited in the breaſts of the landholders of theſe kingdoms, large tracks of land that now lie unimproved, will be cultivated, and, after ſome years, enough may probably be raiſed to anſwer the uſual demands for exportation.

By this means the revenue, which has been ſo greatly diminiſhed by the unhappy diviſions between Great-Britain and the colonies, will be in a great meaſure reſtored. The duties to be collected for this purpoſe may either be laid on the plants before they are gathered, or during the time of cure,

as

as on the article of malt; the collection of which would be attended with very little additional expence, and probably, at no diſtant period, amount to as much as was heretofore received on imported tobacco. When the happy æra arrives that will unite once more Great-Britain to the American colonies (an event, I fear, more to be wiſhed than expected) and a conſtant uninterrupted ſupply of this neceſſary exotic provided, the wonted reſtraint might be renewed, as far as is conſiſtent with the ſituation of both countries at that time.

By purſuing the rules laid down in the preceding chapters, which I have endeavoured to give in as explicit terms as poſſible, country gentlemen and landholders in general will be enabled to raiſe much better tobacco than that which is uſually imported from Maryland or Virginia: for notwithſtanding there are not wanting prohibitory laws in thoſe countries to prevent the planters from ſending to market any but the

principal leaves, yet as moſt other commodities are ſubject to abuſe or adulteration, they frequently, to increaſe their profit, ſuffer the ſprouts to grow, and mix the ſmaller leaves of theſe with the others, which renders them much inferior in goodneſs.

The crops that I have reaſon to believe may be raiſed in England, will greatly exceed in flavour and efficacy any that is imported from the ſouthern colonies: for though northern climates require far more care and exactneſs to cultivate and bring tobacco to a proper ſtate of maturity than warmer latitudes, yet this tardineſs of growth tends to impregnate the plants with a greater quantity of ſalts, and conſequently of that aromatic flavour for which it is prized, than is to be found in the produce of hotter climes, where it is brought to a ſtate of perfection, from the ſeed, in half the time required in colder regions.

A pound of tobacco raiſed in New-England or Nova-Scotia is ſuppoſed to contain

as

as much real ſtrength as two pounds of Virginia; and I doubt not but that near double the quantity of ſalts might be extracted from it by a chymical proceſs.

Good tobacco, the produce of the northern colonies, is powerful, aromatic, and has a moſt pleaſing flavour. The fumes of it are invigorating to the head, and leave not that nauſea on the ſtomach that the common ſort does. As much time would be required to ſmoke one pipe of it, as three of that which is generally uſed: before ſo great a quantity of the vapour could be drawn from it as to prove hurtful, the ſmoker, from intoxication, would be unable to continue his amuſement. I can truly ſay, after a reſidence of ſeveral years in England, that I never met with any tobacco, though I frequently ſmoke, that in ſtrength or the delicacy of its flavour, is to be compared with that which I have been accuſtomed to in New-England.

Many authors have given accounts of the bad effects proceeding from an immoderate uſe of tobacco. Borrhi mentions a perſon, who through exceſs of ſmoking, had dried his brain to ſo great a degree, that after his death there was nothing found in his ſkull but a ſmall black lump conſiſting of mere membranes. From the uſe of good tobacco this could not have happened; for, as I have juſt obſerved, the fumes which only prove noxious from an immoderate continuance, could not have been repeated ſo often as to produce ſuch dreadful effects.

To the inſtructions already given I ſhall add, that I would adviſe the planter, in his firſt trials, not to be too avaricious, but to top his plants before they have gained their utmoſt height; leaving only about the middle quantity of leaves directed before, to give it a tolerable degree of ſtrength. For though this, if exceſſive, might be abated during the cure, by an increaſe of ſweating, or be remedied the next ſeaſon by more

leaves

leaves being ſuffered to grow, it can never be added; and without a certain degree, the tobacco will always be taſteleſs and of little value. On the contrary, though it be ever ſo much weakened by ſweating, and thereby rendered mild, yet it will never loſe that aromatic flavour which accompanied that ſtrength, and which greatly adds to its value.

In the directions before given for raiſing the plants from the ſeed, I have omitted to mention the ſize of the beds on which a ſpecified number of them may be produced. I apprehend that a ſquare yard of land, for which a very ſmall quantity of ſeed is ſufficient, they being ſo diminutive, will produce about five hundred plants, and allow proper ſpace for their nurture till they are fit to tranſplant.

I ſhall alſo juſt add, though the example can only be followed in particular parts of theſe kingdoms, that the Americans uſually chuſe for the place where they intend to

make

make the ſeedling-bed, part of a copſe, or a ſpot of ground covered with wood, of which they burn down ſuch a portion as they think neceſſary. Having done this, they rake up the ſubjacent mould, and mixing it with the aſhes thus produced, ſow therein the ſeed, without adding any other manure, or taking any other ſteps. Where this method cannot be purſued (though it is much the beſt, as it deſtroys at the ſame time the weeds) wood aſhes, which are moſt proper manure for this purpoſe, may be ſtrewed over the mould in which the ſeed is deſigned to be ſown.

The Author preſumes that the preceding inſtructions will be found ſufficient for any perſon inclined to enter upon the cultivation of tobacco; yet if any nobleman or gentleman wiſhes to conſult him upon the ſubject, he will give his attendance on receiving a line at his Publiſher's.

FINIS.